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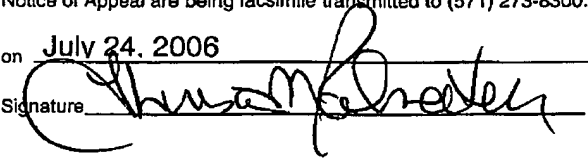

JUL 24 2006

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PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		60469-166; OT-5016	
CERTIFICATE OF FACSIMILE I hereby certify that this Pre-Appeal Brief Request For Review and Notice of Appeal are being facsimile transmitted to (571) 273-8300. on <u>July 24, 2006</u> Signature <u></u> Typed or printed name <u>Theresa M. Palmateer</u>		Application Number <u>10/501,659</u>	Filed <u>07/14/2004</u>
		First Named Inventor <u>Marler, Mark E.</u>	
		Art Unit <u>3654</u>	Examiner <u>Pico, Eric E.</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the			
<input type="checkbox"/> applicant/inventor.		Signature	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		Typed or printed name <u>David J. Gaskey</u>	
<input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>37,139</u>		Telephone number <u>248-988-8360</u>	
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		Date <u>July 24, 2006</u>	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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OT-5016

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: Marler, Mark E.
Serial No. 10/501,659
Filing Date: 07/14/2004
Art Unit: 3654
Examiner: Pico, Eric E.
For: ELEVATOR SYSTEM DESIGN INCLUDING
A BELT ASSEMBLY WITH A VIBRATION
AND NOISE REDUCING GROOVE
CONFIGURATION

REQUEST FOR PRE-APPEAL BRIEF REVIEW

Mail Stop AF
Commissioner For Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

There is no prima facie case of obviousness because the Examiner's proposed combination of the *Baranda* and *Yaginuma* references cannot be made and even if it could, does not teach the same result as Applicant's claimed invention.

The Examiner cannot combine a 320mm sheave (as used with traditional round steel ropes) from the *Baranda* reference with the flat belt groove width of the *Yaginuma* reference. The *Baranda* reference teaches away from using a large diameter (e.g., 320mm) sheave in combination with a flat belt. (Column 1, lines 36-43)

The *Baranda* reference teaches away from using such large sized sheaves to reduce costs. "The larger the sheave diameter D, the greater torque required from the machine to drive the elevator system." (Col. 1, lines 41-45)

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Baranda's disclosed example flat belts are at least partially intended to minimize the diameter of the sheave as much as possible. "Minimizing the diameter D of the sheave permits the use of less costly, more compact, high speed motors." (Col. 2, lines 50-52) "Smaller sheave diameters reduce the required torque ... and increase the rotational speed. Therefore, smaller and less costly machines may be used to drive the elevator system." (Col. 2, lines 60-64)

No reasonable interpretation of the *Baranda* reference would lead one to use a 320 mm (or larger) diameter sheave with a flat belt. Instead, only a smaller sheave combination with a flat belt would be reasonable from the teachings of the *Baranda* reference on its face. The Examiner is going contrary to the teachings of the *Baranda* reference when making the proposed combination of a 320 mm sheave used with a traditional round steel rope from the *Baranda* reference with the flat belt of the *Yaginuma* reference. That combination cannot be made because it is directly contrary to the teachings of the *Baranda* reference.

The *Baranda* reference teaches that using a flat aramid fiber belt in place of 10 mm SISAL core steel wire ropes provides an 80% reduction in sheave size. The required ratio between sheave diameter and steel rope diameter provides for a 400 mm diameter sheave in that example. Reducing a 400 mm diameter sheave by 80% results in an 80 mm sheave. If one were to use the belt of *Yaginuma* with an 80 mm sheave, that would result in a ratio of groove width to sheave diameter that is outside of the scope of Applicant's claims (e.g., $1.5/80 = .019$). Therefore, even if the combination could somehow be made, the result is not the same as the claimed invention and there is no *prima facie* case of obviousness.

The *Baranda* reference also describes a 60% sheave diameter reduction for an 8 mm aramid fiber rope arrangement. (Col. 7, lines 40-43) It is important to note that the art does not teach using the 320 mm sheave with the aramid ropes. Instead, everything indicates that the

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aramid ropes allow for reducing sheave diameter and, therefore, the only reasonable interpretation is that the sheave diameter used with the 8 mm aramid fiber ropes of the *Baranda* reference was less than 320 mm. See, e.g., column 2. The patents cited in column 1 of the *Baranda* reference also indicate that smaller sheave diameters are used with the aramid ropes compared to the sheave diameters used for steel ropes. U.S. Patent No. 4,624,097, for example, teaches a sheave preferably 24 times larger in diameter than an aramid rope (or the sheave diameter could be 17 times greater). Nothing in the *Baranda* reference teaches anything different regarding the size of a sheave used with an aramid rope. Using the "sheave diameter is 24 times aramid rope diameter" teaching from the '097 patent cited in the *Baranda* reference and combining that with *Yaginuma's* 1.5 mm groove width does not result in Applicant's claimed invention. Using an 8 mm aramid rope and a sheave having a diameter that is 24 times larger (e.g., 192 mm) and then reducing that sheave diameter by 60% and combining that with a 1.5 mm groove width from *Yaginuma* yields a result that is outside of the scope of Applicant's claims (e.g., $1.5/8 \times 24 \times 40\% = .02$).

Therefore, even if one could combine the belt of the *Yaginuma* reference with the sheaves actually taught by the *Baranda* reference for use with a flat belt, the result would not be Applicant's claimed invention and there is no *prima facie* case of obviousness.

The *Yaginuma* reference does not teach using a large sheave, either. Even being generous, the diameter of the pulley 20 in Figure 1 is not even twice the width of the belt of the *Yaginuma* reference, which is expressly taught as being 25 mm. In other words, the *Yaginuma* reference does not show a sheave that is even 50 mm in diameter. Certainly nobody looking at the teachings of that reference would be lead to incorporate a 320 mm sheave. Given that and the fact that the *Baranda* reference repeatedly teaches using smaller diameter sheaves for flat

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belts, there is no motivation to lead one skilled in the art to make the type of combination suggested by the Examiner.

Applicant respectfully submits that the proposed additions of the *Aulanko* and *Hull* references, respectively, to the base combination of the *Baranda* reference and *Yaginuma* references does not establish a *prima facie* case, either.

Applicant respectfully submits that there is no *prima facie* case against claim 17 under 35 U.S.C. §103 based upon the *Hull* reference. It appears that the Examiner is proposing to take a feature of *longitudinal* grooves of the *Hull* reference and incorporate them into a *transverse* groove on the *Hull* reference for the purpose of "increasing the amount of material providing a longer life span." That finds no support within the *Hull* reference and such a modification is not a reasonable extension of the teachings of the *Hull* reference. The Examiner acknowledges that a radius of curvature of the ends 46A of the transverse grooves 28 in the *Hull* reference is 1.19 mm. The Examiner then tries to take the .004 inch radius of curvature for the longitudinal grooves and substitute that into the transverse grooves of the *Hull* reference. If it were beneficial to do that, the *Hull* reference would have done that. The *Hull* reference expressly teaches different radii of curvature at the edges of the transverse and longitudinal grooves, respectively. If using the longitudinal groove feature on the transverse grooves had any benefit such as providing longer useful life, the *Hull* reference certainly would have taught that. *Hull*, as the inventor of the groove arrangement in that reference would have recognized that benefit and would have expressly taught it if, in fact, there were any motivation for making the transverse grooves like the longitudinal grooves of that reference.

The Examiner's rejection of claim 17 appears to be based purely on hindsight reasoning and goes directly contrary to the *Hull* reference, which provides different radii on the differently

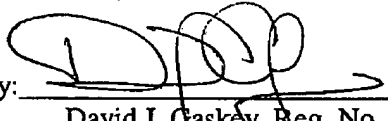
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oriented grooves. There is nothing within the *Hull* reference that suggests the Examiner's modification of that reference. The Examiner's conclusion appears to be based purely on hindsight reasoning and an attempted reconstruction of the teachings of the *Hull* reference to manufacture a *prima facie* case of obviousness against Applicant's claim 17. That type of analysis is not permitted under 35 U.S.C. §103.

There is no *prima facie* case against any of Applicant's claims.

Respectfully submitted,

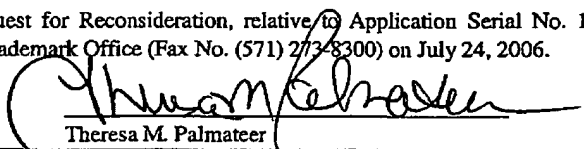
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Dated: July 24, 2006

CERTIFICATE OF FACSIMILE

I hereby certify that this Request for Reconsideration, relative to Application Serial No. 10/501,659, is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on July 24, 2006.


Theresa M. Palmateer

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